# **Data Validation Checklist Semivolatile Organic Analyses**

Project:	35 <sup>TH</sup> Avenue Superfund Site	Project No:	15268508.20000
Laboratory:	TestAmerica – Tampa, FL	Job ID.:	680-87279-1
Method:	SW-846 8270C Low-Level (PAH)	Associated Sampl	les: Refer to Attachment A (Sample Summary)
Matrix:	Soil	Date(s) Collected	: 02/06/2013
Reviewer:	Jane Lindsey	Date:	02/27/2013
Concurrence <sup>1</sup> :	Carol Lovett, Martha Meyers-Lee	Date:	03/27/2013

	Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1.	Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ-flag results.	✓				
2.	Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3.	Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		<b>√</b>			
4.	Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5.	Were holding times met ( $\leq$ 7 and 14 days from collection to extraction for aqueous and solid samples, respectively; $\leq$ 40 days from extraction to analysis)? If not, then J/UJ-flag sample results. If grossly (2x) exceeded, then flag J/R.	<b>√</b>				
6.	Were results for all project-specified target analytes reported?	✓				
7.	Were project-specified Reporting Limits achieved for undiluted sample analyses?	✓				
8.	Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J-flag sample result.			<b>√</b>		
9.	Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10.	Were target analytes detected in the method blank?		✓			
11.	Were target analytes detected in equipment/rinsate blanks?		<b>√</b>		PAHs were not detected during the analysis of rinsate blank 020513-RB-Bowls+Spoons (680-87170-29).	
12.	Are equipment/rinsate blanks associated with every sample? If	✓			According to the QAPP, a rinsate blank is to be collected after each decontamination event, which	

<sup>&</sup>lt;sup>1</sup> Independent technical reviewer URS Group, Inc. Page 1 of 5

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
no, note in DV report.				occurs once per week per the client. A rinsate blank (020513-RB-Bowls+Spoons) was collected during the week of 02/04/2013. The rinsate blank was analyzed for PAHs under Test America Job ID 680-87170-2.	
13. Were analytes detected in samples below the blank contamination action level? If yes, U-flag positive sample results <5x associated blank concentration (10x for common blank contaminants – phthalates)			<b>√</b>	Blank contamination does not exist.	
14. Is a field duplicate associated with this Job?		✓			
15. Was precision deemed acceptable as defined by the project plans?			✓		
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW-846 8270C) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	<b>√</b>			Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
<ul> <li>18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument?</li> <li>Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative.</li> <li>An initial calibration is to be associated with each sample analysis.</li> <li>A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument.</li> </ul>	✓			<ul> <li>Initial Calibration: 01/30/2013, instrument BSMA5973</li> <li>ICV: 01/30/2013 @13:35</li> <li>CCV: 02/14/2013 @10:21</li> <li>CCV: 02/15/2013 @12:36</li> <li>Initial Calibration: 01/07/2013, instrument BSMC5973</li> <li>ICV: 01/07/2013 @17:31</li> <li>CCV: 02/14/2013 @14:56</li> <li>CCV: 02/15/2013 @11:56</li> <li>CCV: 02/18/2013 @14:07</li> </ul>	
<ul> <li>19. Were calibration results within laboratory/project specifications?</li> <li>ICAL (Criteria: ≤15 mean %RSD with individual CCC %RSD ≤30 (≤50% for poor performers), OR r≥0.995, OR</li> </ul>		<b>*</b>		ICV of 01/30/13 @ 13:35, instrument BSMA5973: 2- Methylnaphthalene @23.7 %D (Lab: ≤35, Project: ≤20). Positive bias is indicated by the CCV percent	J

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
r²≥0.99, and RRF ≥0.050 (≥0.010 for poor performers)):  o If %RSD>15 (>50% for poor performers), or r <0.995, or r² <0.995, then J-flag positive results and UJ-flag non-detects  o If mean RRF <0.050 (<0.010 for poor performers), then J-flag positive results and R-flag non-detects  • ICV and CCV (Criteria: ≤20%D (≤50% for poor performers) and RF ≥0.050 (≥0.010 for poor performers)):  o If %D>20 (>50% for poor performers), then J-flag positive results and UJ-flag non-detects  o If RF <0.050 (<0.010 for poor performers), then UJ-flag non-detected semivolatile target compounds	ies	NO	IVA	Samples (Analytes) Affected/Comments difference; therefore, J flag detected 2-methyl naphthalene result in associated samples <sup>2</sup> .	riag
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J-flag positive results when %R >Upper Control Limit (UCL) and J/R-flag results when %R <lower (lcl).<="" control="" limit="" td=""><td>✓</td><td></td><td></td><td></td><td></td></lower>	✓				
22. Were LCS/LCSD RPD within lab specifications? If no, J-flag positive results and UJ-flag non-detects		<b>√</b>		LCS only	
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				
24. Is the MS/MSD parent sample a project-specific sample?	✓			<ul> <li>Prep Batch 134445: 680-87218-45 (batch sample), MS/MSD</li> <li>Prep Batch 134455: 680-87279-6 (FM0138B-CS), MS/MSD</li> </ul>	
<ul> <li>25. Were MS/MSD recoveries within laboratory/project specifications? Only QC results for project samples that are reported under this Job ID are evaluated.</li> <li>If the native sample concentration &gt; 4x spiking level, then an evaluation of interference is not possible.</li> <li>If either MS or MSD recovery meets control limits, qualification of data is not warranted.</li> <li>MS and MSD %R&lt;10: J and R Flag positive and ND results, respectively</li> <li>MS and MSD %R &gt;10 and <lcl: and="" j-flag="" li="" non-detect="" positive="" results<="" uj-flag=""> <li>MS and MSD R% &gt;UCL (or 140): J-Flag positive results</li> </lcl:></li></ul>	✓				

<sup>&</sup>lt;sup>2</sup> 680-87279-1 through 12, 14, and 20 URS Group, Inc. Page 3 of 5

<ul> <li>26. Were laboratory criteria met for precision during the MS/MSD analysis? Only QC results for project samples that are reported under this Job ID are evaluated.</li> <li>If the native sample concentration &gt; 4x spiking level, then an evaluation of interference is not possible.</li> <li>If %RPD &gt; UCL, J-flag positive result and UJ-flag non-detect result</li> <li>27. Were surrogate recoveries within lab/project specifications?</li> <li>If %R &lt;10, then J-flag positive and R-flag non-detect associated sample results</li> <li>If %R &gt;UCL, then J-flag positive results</li> <li>%R ≥10%, but <lcl, and="" j-flag="" li="" non-detect="" positive="" results="" results<="" then="" uj-flag=""> </lcl,></li></ul>	<b>✓</b>	<b>V</b>	Samples (Analytes) Affected/Comments  FM0138B-CS (680-87279-6): Benzo(k)fluoranthene MS/MSD RPD @ 41% (≤40). Flag result with UJ.  .	Flag UJ
<ul> <li>If %R &lt;10, then J-flag positive and R-flag non-detect associated sample results</li> <li>If %R &gt;UCL, then J-flag positive results</li> <li>%R ≥10%, but <lcl, and="" j-flag="" li="" non-detect="" positive="" results="" results<="" then="" uj-flag=""> </lcl,></li></ul>	<b>√</b>			
• If 1 %R >UCL and 1 %R ≥10%, but <lcl, and="" j-flag="" non-detect="" positive="" results="" results<="" td="" then="" uj-flag=""><td></td><td></td><td></td><td></td></lcl,>				
<ul> <li>28. Were internal standard (IS) results within lab/project specifications?</li> <li>If IS area counts are less than 50% of the midpoint calibration standard, then J-flag positive and UJ-flag non-detect associated sample results</li> <li>If IS area counts are greater than 100% of the midpoint calibration standard, then J-flag positive results</li> <li>If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J-flag positive and R-flag non-detect results</li> <li>If retention time of sample's internal standard is not within 30 seconds of the associated calibration standard, R-flag associated data.</li> <li>The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met.</li> </ul>	<b>✓</b>		Refer to <b>Attachment B</b> (Case Narrative)	

Job ID.: 680-87279-1 Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag

Comments: The data validation was conducted in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012). The data review process was modeled after the USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review (EPA, October 1999) and USEPA CLP NFG for Low Concentration Organic Methods Data Review (EPA, June 2001). Sample results have been qualified based on the results of the data review process (Attachment C). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.

#### **DV Flag Definitions:**

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- R The sample results are unusable. The analyte may or may not be present in the sample.
- U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
- UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

# ATTACHMENT A SAMPLE SUMMARY

# **Sample Summary**

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87279-1

SDG: 68087279-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-87279-1	FM0018B-CS	Solid	02/06/13 08:55	2/08/13 09:16
680-87279-2	FM0018C-CS	Solid	02/06/13 08:59 02	2/08/13 09:16
680-87279-3	FM0034B-CS	Solid	02/06/13 10:24 03	2/08/13 09:16
680-87279-4	FM0123B-CS	Solid	02/06/13 08:37 02	2/08/13 09:16
680-87279-5	FM0138A-CS	Solid	02/06/13 10:40 03	2/08/13 09:16
680-87279-6	FM0138B-CS	Solid	02/06/13 10:43 02	2/08/13 09:16
680-87279-7	FM0139A-CS	Solid	02/06/13 11:24 02	2/08/13 09:16
680-87279-8	FM0139B-CS	Solid	02/06/13 11:30 03	2/08/13 09:16
680-87279-9	FM0139C-CS	Solid	02/06/13 11:35 02	2/08/13 09:16
680-87279-10	FM0153A-CS	Solid	02/06/13 10:02 02	2/08/13 09:16
680-87279-11	CV0748X-CS	Solid	02/06/13 08:54 02	2/08/13 09:16
680-87279-12	CV0748Z-CS	Solid	02/06/13 09:09 02	2/08/13 09:16
680-87279-14	CV0748FF-CS	Solid	02/06/13 09:49 02	2/08/13 09:16
680-87279-15	CV0748GG-CS	Solid	02/06/13 09:52 02	2/08/13 09:16
680-87279-16	CV0748HH-CS	Solid	02/06/13 10:10 03	2/08/13 09:16
680-87279-17	CV0748KK-CS	Solid	02/06/13 10:41 0	2/08/13 09:16
680-87279-18	CV0748LL-CS	Solid	02/06/13 10:48 02	2/08/13 09:16
680-87279-19	CV0748MM-CS	Solid	02/06/13 10:50 02	2/08/13 09:16
680-87279-20	CV0748PP-CS	Solid	02/06/13 11:10 02	2/08/13 09:16

ATTACHMENT B

**CASE NARRATIVE** 

#### **Case Narrative**

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87279-1

SDG: 68087279-1

Job ID: 680-87279-1

Laboratory: TestAmerica Savannah

Narrative

#### **CASE NARRATIVE**

Client: Oneida Total Integrated Enterprises LLC

**Project: 35th Avenue Superfund Site** 

Report Number: 680-87279-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

The samples were received on 02/08/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.8 C.

#### SEMIVOLATILE ORGANIC COMPOUNDS BY GCMS - LOW LEVEL

Samples FM0018B-CS (680-87279-1), FM0018C-CS (680-87279-2), FM0034B-CS (680-87279-3), FM0123B-CS (680-87279-4), FM0138A-CS (680-87279-5), FM0138B-CS (680-87279-6), FM0139A-CS (680-87279-7), FM0139B-CS (680-87279-8), FM0139C-CS (680-87279-9), FM0153A-CS (680-87279-10), CV0748X-CS (680-87279-11), CV0748Z-CS (680-87279-12), CV0748FF-CS (680-87279-14), CV0748GG-CS (680-87279-15), CV0748HH-CS (680-87279-16), CV0748KK-CS (680-87279-17), CV0748LL-CS (680-87279-18), CV0748MM-CS (680-87279-19) and CV0748PP-CS (680-87279-20) were analyzed for Semivolatile Organic Compounds by GCMS - Low Level in accordance with EPA SW-846 Method 8270C. The samples were prepared on 02/13/2013 and 02/14/2013 and analyzed on 02/14/2013, 02/15/2013 and 02/18/2013.

Samples FM0018C-CS (680-87279-2)[4X], FM0139A-CS (680-87279-7)[4X], FM0139A-CS (680-87279-7)[40X], CV0748X-CS (680-87279-11)[4X], CV0748Z-CS (680-87279-12)[4X], CV0748GG-CS (680-87279-15)[4X] and CV0748HH-CS (680-87279-16)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Several analytes recovered outside the recovery criteria for the MS/MSD of sample 680-87218-45 in batch 660-134523. Benzo[k]fluoranthene exceeded the rpd limit.

No other difficulties were encountered during the Semivolatile Organic Compounds by GCMS - Low Level analyses.

All other quality control parameters were within the acceptance limits.

# ATTACHMENT C QUALIFIED SAMPLE RESULTS

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87279-1 SDG: 68087279-1

Client Sample ID: FM0018B-CS Lab Sample ID: 680-87279-1

Date Collected: 02/06/13 08:55 Date Received: 02/08/13 09:16 Matrix: Solid

Percent Solids: 78.6

Analyte	Result	Qualifier	RL /	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	25	ug/Kg	Ø	02/13/13 15:28	02/14/13 19:10	1
Acenaphthylene	50	U	50	6.2	ug/Kg	₽	02/13/13 15:28	02/14/13 19:10	্ৰ
Anthracene	10	Ų	10	5.2	ug/Kg	Ľξξ	02/13/13 15:28	02/14/13 19:10	3
Benzo[a]anthracene	19		10	4.9	ug/Kg	₽	02/13/13 15:28	02/14/13 19:10	1
Benzo[a]pyrene	10	J	13	6.5	ug/Kg	Ċ	02/13/13 15:28	02/14/13 19:10	1
Benzo[b]fluoranthene	14	J	15	7.6	ug/Kg	₽	02/13/13 15:28	02/14/13 19:10	7
Benzo[g,h,i]perylene	7.8	J	25	5.5	ug/Kg	φ	02/13/13 15:28	02/14/13 19:10	1
Benzo[k]fluoranthene	10	U	10	4.5	ug/Kg	Þ	02/13/13 15:28	02/14/13 19:10	4
Chrysene	13		11	5.6	ug/Kg	草	02/13/13 15:28	02/14/13 19:10	4
Dibenz(a,h)anthracene	25	U	25	5.1	ug/Kg	D.	02/13/13 15:28	02/14/13 19:10	4
Fluoranthene	14	J	25	5.0	ug/Kg	¤	02/13/13 15:28	02/14/13 19:10	া
Fluorene	25	U	25	5.1	ug/Kg	₽	02/13/13 15:28	02/14/13 19:10	-1
Indeno[1,2,3-cd]pyrene	25	U	25	8.9	ug/Kg	₿	02/13/13 15:28	02/14/13 19:10	4
1-Methylnaphthalene	50	U	50	5.5	ug/Kg	₽	02/13/13 15:28	02/14/13 19:10	1
2-Methylnaphthalene	50	* * الو	50	8.9	ug/Kg	₽	02/13/13 15:28	02/14/13 19:10	1
Naphthalene	12	J	50	5.5	ug/Kg	Ď.	02/13/13 15:28	02/14/13 19:10	1
Phenanthrene	14		10	4.9	ug/Kg	Þ	02/13/13 15:28	02/14/13 19:10	7
Pyrene	12	J	25	4.6	ug/Kg	ά	02/13/13 15;28	02/14/13 19:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	67	-	30 - 130				02/13/13 15:28	02/14/13 19:10	1

Client Sample ID: FM0018C-CS

Date Collected: 02/06/13 08:59 Date Received: 02/08/13 09:16 Lab Sample ID: 680-87279-2

Matrix: Solid Percent Solids: 80.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	480	U	480	97	ug/Kg	Ø	02/13/13 15:28	02/14/13 19:25	
Acenaphthylene	91	J	190	24	ug/Kg	₽	02/13/13 15:28	02/14/13 19:25	4
Anthracene	87		41	20	ug/Kg	Ġ	02/13/13 15:28	02/14/13 19:25	4
Benzo[a]anthracene	160		39	19	ug/Kg	Þ	02/13/13 15:28	02/14/13 19:25	4
Benzo[a]pyrene	130		50	25	ug/Kg	₽	02/13/13 15:28	02/14/13 19:25	4
Benzo[b]fluoranthene	260		59	29	ug/Kg	₽	02/13/13 15:28	02/14/13 19:25	4
Benzo[g,h,i]perylene	97		97	21	ug/Kg	ø	02/13/13 15:28	02/14/13 19:25	4
Benzo[k]fluoranthene	75		39	17	ug/Kg	ά	02/13/13 15:28	02/14/13 19:25	4
Chrysene	270		43	22	ug/Kg	₽	02/13/13 15:28	02/14/13 19:25	4
Dibenz(a,h)anthracene	33	J	97	20	ug/Kg	¢	02/13/13 15:28	02/14/13 19:25	4
Fluoranthene	550		97	19	ug/Kg	₽	02/13/13 15:28	02/14/13 19:25	4
Fluorene	97	U	97	20	ug/Kg	φ	02/13/13 15:28	02/14/13 19:25	4
Indeno[1,2,3-cd]pyrene	120		97	34	ug/Kg	¢	02/13/13 15:28	02/14/13 19:25	4
1-Methylnaphthalene	190	U	190	21	ug/Kg	Ф	02/13/13 15:28	02/14/13 19:25	4
2-Methylnaphthalene	190	* حکر ∪	190	34	ug/Kg	Þ	02/13/13 15:28	02/14/13 19:25	4
Naphthalene	50	J	190	21	ug/Kg	¢	02/13/13 15:28	02/14/13 19:25	4
Phenanthrene	200		39	19	ug/Kg	¢	02/13/13 15:28	02/14/13 19:25	4
Pyrene	380		97	18	ug/Kg	ф	02/13/13 15:28	02/14/13 19:25	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
o-Terphenyl	105		30 - 130				02/13/13 15:28	02/14/13 19:25	4

<sup>\*</sup> Flagging error, M Meyers-Lee, 3/27/2013

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87279-1 SDG: 68087279-1

Lab Sample ID: 680-87279-3

Matrix: Solid

Percent Solids: 95.4

#### Client Sample ID: FM0034B-CS

Date Collected: 02/06/13 10:24 Date Received: 02/08/13 09:16

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	ŢĮ.	02/13/13 15:28	02/14/13 19:41	1
Acenaphthylene	41	U	41	5.2	ug/Kg	ť	02/13/13 15:28	02/14/13 19:41	1
Anthracene	12		8.7	4.3	ug/Kg	Ü	02/13/13 15:28	02/14/13 19:41	া
Benzo[a]anthracene	42		8.3	4.0	ug/Kg	Ŕ	02/13/13 15:28	02/14/13 19:41	1
Benzo[a]pyrene	29		11	5.4	ug/Kg	Ü	02/13/13 15:28	02/14/13 19:41	্ৰ
Benzo[b]fluoranthene	49		13	6.3	ug/Kg	¢	02/13/13 15:28	02/14/13 19:41	1
Benzo[g,h,i]perylene	27		21	4,5	ug/Kg	Ď	02/13/13 15:28	02/14/13 19:41	1
Benzo[k]fluoranthene	10		8,3	3.7	ug/Kg	Φ	02/13/13 15:28	02/14/13 19:41	1
Chrysene	41		9.3	4.7	ug/Kg	Ü	02/13/13 15:28	02/14/13 19:41	1
Dibenz(a,h)anthracene	12	J	21	4,2	ug/Kg	₽	02/13/13 15:28	02/14/13 19:41	1
Fluoranthene	62		21	4.1	ug/Kg	Ü	02/13/13 15:28	02/14/13 19:41	1
Fluorene	5.4	J	21	4.2	ug/Kg	Ü	02/13/13 15:28	02/14/13 19:41	1
Indeno[1,2,3-cd]pyrene	29		21	7,3	ug/Kg	ţţ.	02/13/13 15:28	02/14/13 19:41	1
1-Methylnaphthalene	8.5		41	4.5	ug/Kg	₽	02/13/13 15:28	02/14/13 19:41	1
2-Methylnaphthalene	16	₽ J	41	7.3	ug/Kg	草	02/13/13 15:28	02/14/13 19:41	1
Naphthalene	23	J	41	4.5	ug/Kg	Ø	02/13/13 15:28	02/14/13 19:41	1
Phenanthrene	50		8.3	4.0	ug/Kg	Ċ1	02/13/13 15:28	02/14/13 19:41	1
Pyrene	49		21	3,8	ug/Kg	ζî	02/13/13 15:28	02/14/13 19:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	85		30 - 130				02/13/13 15:28	02/14/13 19:41	1

Client Sample ID: FM0123B-CS

Date Collected: 02/06/13 08:37 Date Received: 02/08/13 09:16 Lab Sample ID: 680-87279-4

Matrix: Solid

Percent Solids: 74.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	130	U	130	27	ug/Kg	ŢĴ	02/13/13 15:28	02/14/13 19:56	1
Acenaphthylene	54	U	54	6.7	ug/Kg	章	02/13/13 15:28	02/14/13 19:56	1
Anthracene	7.9	J	11	5,7	ug/Kg	121	02/13/13 15:28	02/14/13 19:56	1
Benzo[a]anthracene	33		11	5,3	ug/Kg	Ç1	02/13/13 15:28	02/14/13 19:56	1
Велzo[a]pyrene	19		14	7.0	ug/Kg	ţ	02/13/13 15:28	02/14/13 19:56	1
Benzo[b]fluoranthene	29		16	8.2	ug/Kg	Ü	02/13/13 15:28	02/14/13 19:56	1
Benzo[g,h,i]perylene	17	J	27	5.9	ug/Kg	Φ	02/13/13 15:28	02/14/13 19:56	1
Benzo[k]fluoranthene	12		11	4.8	ug/Kg	ø	02/13/13 15:28	02/14/13 19:56	-1
Chrysene	21		12	6.1	ug/Kg	Ç	02/13/13 15:28	02/14/13 19:56	1
Dibenz(a,h)anthracene	6.3	J	27	5.5	ug/Kg	ţ;	02/13/13 15:28	02/14/13 19:56	1
Fluoranthene	36		27	5.4	ug/Kg	¢)	02/13/13 15:28	02/14/13 19:56	1
Fluorene	27	U	27	5.5	ug/Kg	ÇI	02/13/13 15:28	02/14/13 19:56	1
Indeno[1,2,3-cd]pyrene	14	J	27	9.6	ug/Kg	D)	02/13/13 15:28	02/14/13 19:56	1
1-Methylnaphthalene	12	J	54	5.9	ug/Kg	Φ	02/13/13 15:28	02/14/13 19:56	4
2-Methylnaphthalene	13	₽ J	54	9.6	ug/Kg	Þ	02/13/13 15:28	02/14/13 19:56	1
Naphthalene	16	J	54	5.9	ug/Kg	Q	02/13/13 15:28	02/14/13 19:56	1
Phenanthrene	23		11	5,3	ug/Kg	ζį	02/13/13 15:28	02/14/13 19:56	া
Pyrene	27		27	5.0	ug/Kg	= G	02/13/13 15:28	02/14/13 19:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	69		30 - 130				02/13/13 15:28	02/14/13 19:56	1

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87279-1 SDG: 68087279-1

Lab Sample ID: 680-87279-5

Matrix: Solid Percent Solids: 85.7

Matrix: Solid

Client Sample ID: FM0138A-CS
Date Collected: 02/06/13 10:40
Date Received: 02/08/13 09:16

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	Ū	120	23	ug/Kg	- \$	02/13/13 15:28	02/14/13 20:11	1
Acenaphthylene	46	U	46	5.8	ug/Kg	₽	02/13/13 15:28	02/14/13 20:11	1
Anthracene	14		9.8	4.9	ug/Kg	ø	02/13/13 15:28	02/14/13 20:11	1
Benzo[a]anthracene	56		9.3	4.5	ug/Kg	◊	02/13/13 15:28	02/14/13 20:11	1
Benzo[a]pyrene	32		12	6.0	ug/Kg	₽	02/13/13 15:28	02/14/13 20:11	1
Benzo[b]fluoranthene	59		14	7,1	ug/Kg	₽	02/13/13 15:28	02/14/13 20:11	1
Benzo[g,h,i]perylene	41		23	5,1	ug/Kg	₩	02/13/13 15:28	02/14/13 20:11	1
Benzo[k]fluoranthene	18		9.3	4.2	ug/Kg	≎	02/13/13 15:28	02/14/13 20:11	1
Chrysene	54		10	5.2	ug/Kg	₽	02/13/13 15:28	02/14/13 20:11	1
Dibenz(a,h)anthracene	16	J	23	4.8	ug/Kg	₽	02/13/13 15:28	02/14/13 20:11	1
Fluoranthene	68		23	4.6	ug/Kg	Ď.	02/13/13 15:28	02/14/13 20:11	1
Fluorene	6.0	J	23	4.8	ug/Kg	₽	02/13/13 15:28	02/14/13 20:11	1
Indeno[1,2,3-cd]pyrene	29		23	8.3	ug/Kg	₽	02/13/13 15:28	02/14/13 20:11	1
1-Methylnaphthalene	24		46	5.1	ug/Kg	₽	02/13/13 15:28	02/14/13 20:11	1
2-Methylnaphthalene	35	$\mathcal{P}_{J}$	46	8.3	ug/Kg	₽	02/13/13 15:28	02/14/13 20:11	1
Naphthalene	33	J	46	5,1	ug/Kg	₿	02/13/13 15:28	02/14/13 20:11	1
Phenanthrene	63		9.3	4.5	ug/Kg	₽	02/13/13 15:28	02/14/13 20:11	1
Pyrene	45		23	4.3	ug/Kg	Þ	02/13/13 15:28	02/14/13 20:11	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	81	-	30 - 130				02/13/13 15:28	02/14/13 20:11	1

Client Sample ID: FM0138B-CS

Date Collected: 02/06/13 10:43 Date Received: 02/08/13 09:16 Lab Sample ID: 680-87279-6

Matrix: Solid Percent Solids: 96.3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	20	ug/Kg	₽	02/14/13 08:35	02/15/13 16:22	1
Acenaphthylene	41	U	41	5.1	ug/Kg	₽	02/14/13 08:35	02/15/13 16:22	1
Anthracene	8.5	U	8.5	4.3	ug/Kg	Þ	02/14/13 08:35	02/15/13 16:22	1
Benzo[a]anthracene	12		8.1	4.0	ug/Kg	₽	02/14/13 08:35	02/15/13 16:22	1
Benzo[a]pyrene	6.2	J	11	5.3	ug/Kg	₽	02/14/13 08:35	02/15/13 16:22	1
Benzo[b]fluoranthene	8.0	J	12	6.2	ug/Kg	₩	02/14/13 08:35	02/15/13 16:22	1
Benzo[g,h,i]perylene	4.5	J,	20	4.5	ug/Kg	草	02/14/13 08:35	02/15/13 16:22	-1
Benzo[k]fluoranthene	8.1	∪∮Ĵ	8.1	3.7	ug/Kg	₽	02/14/13 08:35	02/15/13 16:22	1
Chrysene	9.0	J	9.1	4.6	ug/Kg	ά	02/14/13 08:35	02/15/13 16:22	1
Dibenz(a,h)anthracene	20	U	20	4.2	ug/Kg	☼	02/14/13 08:35	02/15/13 16:22	1
Fluoranthene	12	J	20	4.1	ug/Kg	≎	02/14/13 08:35	02/15/13 16:22	1
Fluorene	20	U	20	4,2	ug/Kg	₽	02/14/13 08:35	02/15/13 16:22	1
Indeno[1,2,3-cd]pyrene	20	U	20	7.2	ug/Kg	☆	02/14/13 08:35	02/15/13 16:22	1
1-Methylnaphthalene	41	U	41	4.5	ug/Kg	₽	02/14/13 08:35	02/15/13 16:22	1
2-Methylnaphthalene	41	U 🎤 *	41	7.2	ug/Kg	\$	02/14/13 08:35	02/15/13 16:22	া
Naphthalene	5.7	J	41	4.5	ug/Kg	¤	02/14/13 08:35	02/15/13 16:22	-1
Phenanthrene	16		8.1	4.0	ug/Kg	Ď.	02/14/13 08:35	02/15/13 16:22	া
Pyrene	10	J	20	3.8	ug/Kg	ά	02/14/13 08:35	02/15/13 16:22	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	68		30 - 130				02/14/13 08:35	02/15/13 16:22	1

<sup>\*</sup> Flagging error, M Meyers-Lee, 3/27/2013

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87279-1 SDG: 68087279-1

Lab Sample ID: 680-87279-7

Matrix: Solid

Percent Solids: 97.0

Client Sample	· ID:	FM0	139A	-CS
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Date Collected: 02/06/13 11:24 Date Received: 02/08/13 09:16

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1600		410	81	ug/Kg	ā	02/13/13 15:28	02/14/13 20:26	4
Acenaphthylene	370		160	20	ug/Kg	₽	02/13/13 15:28	02/14/13 20:26	4
Anthracene	9700		34	17	ug/Kg	₽	02/13/13 15:28	02/14/13 20:26	4
Dibenz(a,h)anthracene	11000		81	17	ug/Kg	₽	02/13/13 15:28	02/14/13 20:26	4
Fluorene	1500		81	17	ug/Kg	草	02/13/13 15:28	02/14/13 20:26	4
1-Methylnaphthalene	320		160	18	ug/Kg	₽	02/13/13 15:28	02/14/13 20:26	4
2-Methylnaphthalene	320	J	160	29	ug/Kg	拉	02/13/13 15:28	02/14/13 20:26	4
Naphthalene	440		160	18	ug/Kg	₽	02/13/13 15:28	02/14/13 20:26	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	84		30 - 130				02/13/13 15:28	02/14/13 20:26	4

Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	47000		330	160	ug/Kg	以	02/13/13 15:28	02/15/13 15:09	40
Benzo[a]pyrene	39000		420	210	ug/Kg	₩	02/13/13 15:28	02/15/13 15:09	40
Benzo[b]fluoranthene	55000		500	250	ug/Kg	₽	02/13/13 15:28	02/15/13 15:09	40
Benzo[g,h,i]perylene	19000	***********	810	180	ug/Kg	苅	02/13/13 15:28	02/15/13 15:09	40
Benzo[k]fluoranthene	26000		330	150	ug/Kg	₽	02/13/13 15:28	02/15/13 15:09	40
Chrysene	40000		370	180	ug/Kg		02/13/13 15:28	02/15/13 15:09	40
Fluoranthene	80000		810	160	ug/Kg	Þ	02/13/13 15:28	02/15/13 15:09	40
Indeno[1,2,3-cd]pyrene	17000		810	290	ug/Kg	Þ	02/13/13 15:28	02/15/13 15:09	40
Phenanthrene	28000		330	160	ug/Kg	Þ	02/13/13 15:28	02/15/13 15:09	40
Pyrene	71000		810	150	ug/Kg	☆	02/13/13 15:28	02/15/13 15:09	40

Client Sample ID: FM0139B-CS

Date Collected: 02/06/13 11:30 Date Received: 02/08/13 09:16 Lab Sample ID: 680-87279-8

Matrix: Solid

Percent Solids: 88.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110	U	110	22	ug/Kg	ф	02/13/13 15:28	02/14/13 20:41	1
Acenaphthylene	8.3	J	44	5.6	ug/Kg	₽	02/13/13 15:28	02/14/13 20:41	1
Anthracene	9.4		9.3	4.7	ug/Kg	Ç.	02/13/13 15:28	02/14/13 20:41	1
Benzo[a]anthracene	35		8.9	4.3	ug/Kg	Þ	02/13/13 15:28	02/14/13 20:41	1
Benzo[a]pyrene	20		12	5.8	ug/Kg	Þ	02/13/13 15:28	02/14/13 20:41	1
Benzo[b]fluoranthene	29		14	6.8	ug/Kg	Ф	02/13/13 15:28	02/14/13 20:41	1
Benzo[g,h,i]perylene	18	J	22	4.9	ug/Kg	ø	02/13/13 15:28	02/14/13 20:41	1
Benzo[k]fluoranthene	15		8.9	4.0	ug/Kg	ø	02/13/13 15:28	02/14/13 20:41	1
Chrysene	34		10	5.0	ug/Kg	Φ	02/13/13 15:28	02/14/13 20:41	1
Dibenz(a,h)anthracene	12	J	22	4.6	ug/Kg	ø	02/13/13 15:28	02/14/13 20:41	1
Fluoranthene	44		22	4.4	ug/Kg	Ü	02/13/13 15:28	02/14/13 20:41	1
Fluorene	5.8	J	22	4.6	ug/Kg	₽	02/13/13 15:28	02/14/13 20:41	1
Indeno[1,2,3-cd]pyrene	15	J	22	7.9	ug/Kg	¢	02/13/13 15:28	02/14/13 20:41	1
1-Methylnaphthalene	15	J	44	4.9	ug/Kg	ζſ	02/13/13 15:28	02/14/13 20:41	1
2-Methylnaphthalene	19	₽ J	44	7.9	ug/Kg	ņ	02/13/13 15:28	02/14/13 20:41	1
Naphthalene	16	J	44	4.9	ug/Kg	草	02/13/13 15:28	02/14/13 20:41	1
Phenanthrene	34		8.9	4.3	ug/Kg	ø	02/13/13 15:28	02/14/13 20:41	1
Pyrene	33		22	4.1	ug/Kg	ø	02/13/13 15:28	02/14/13 20:41	1

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)













Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87279-1

SDG: 68087279-1

Client Sample ID: FM0139B-CS

Lab Sample ID: 680-87279-8

Matrix: Solid Percent Solids: 88.2

Date Collected: 02/06/13 11:30 Date Received: 02/08/13 09:16

Prepared Analyzed Dil Fac Surrogate %Recovery Qualifier Limits 30 - 130 02/13/13 15:28 02/14/13 20:41 o-Terphenyl

Client Sample ID: FM0139C-CS

Lab Sample ID: 680-87279-9

Date Collected: 02/06/13 11:35 Date Received: 02/08/13 09:16

Matrix: Solid Percent Solids: 93.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110	U	110	21	ug/Kg	Ü	02/13/13 15:28	02/14/13 20:56	1
Acenaphthylene	9.7	J	42	5.3	ug/Kg	₿	02/13/13 15:28	02/14/13 20:56	1
Anthracene	14		8.9	4.4	ug/Kg	尊	02/13/13 15:28	02/14/13 20:56	1
Benzo[a]anthracene	50		8.4	4.1	ug/Kg	Ď	02/13/13 15:28	02/14/13 20:56	1
Benzo[a]pyrene	35		11	5.5	ug/Kg	¢	02/13/13 15:28	02/14/13 20:56	1
Benzo[b]fluoranthene	47		13	6.4	ug/Kg	Ö	02/13/13 15:28	02/14/13 20:56	1
Benzo[g,h,i]perylene	33		21	4.6	ug/Kg	Ü	02/13/13 15:28	02/14/13 20:56	1
Benzo[k]fluoranthene	32		8.4	3.8	ug/Kg	ø	02/13/13 15:28	02/14/13 20:56	1
Chrysene	47		9.5	4.7	ug/Kg	₽	02/13/13 15:28	02/14/13 20:56	1
Dibenz(a,h)anthracene	11	J	21	4.3	ug/Kg	₽	02/13/13 15:28	02/14/13 20:56	-1
Fluoranthene	73		21	4.2	ug/Kg	Ü	02/13/13 15:28	02/14/13 20:56	1
Fluorene	21	U	21	4.3	ug/Kg	¤	02/13/13 15:28	02/14/13 20:56	-1
Indeno[1,2,3-cd]pyrene	30		21	7.5	ug/Kg	¤	02/13/13 15:28	02/14/13 20:56	1
1-Methylnaphthalene	14	J	42	4.6	ug/Kg	₽	02/13/13 15:28	02/14/13 20:56	1
2-Methylnaphthalene	15	yo J	42	7.5	ug/Kg	尊	02/13/13 15:28	02/14/13 20:56	1
Naphthalene	23	J	42	4.6	ug/Kg	₽	02/13/13 15:28	02/14/13 20:56	1
Phenanthrene	42		8.4	4.1	ug/Kg	₽	02/13/13 15:28	02/14/13 20:56	1
Pyrene	57		21	3.9	ug/Kg	ø	02/13/13 15:28	02/14/13 20:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	69	-	30 - 130				02/13/13 15:28	02/14/13 20:56	- 1

Client Sample ID: FM0153A-CS

Lab Sample ID: 680-87279-10

Date Collected: 02/06/13 10:02 Date Received: 02/08/13 09:16

Matrix: Solid Percent Solids: 91.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	110	U	110	22	ug/Kg	¢	02/13/13 15:28	02/14/13 21:11	1
Acenaphthylene	43	U	43	5.4	ug/Kg	Ü	02/13/13 15:28	02/14/13 21:11	1
Anthracene	9.1	U	9.1	4.6	ug/Kg	Þ	02/13/13 15:28	02/14/13 21:11	1
Benzo[a]anthracene	19		8.7	4.2	ug/Kg	¢	02/13/13 15:28	02/14/13 21:11	1
Benzo[a]pyrene	6.4	J	11	5,6	ug/Kg	¤	02/13/13 15:28	02/14/13 21:11	1
Benzo[b]fluoranthene	12	J	13	6.6	ug/Kg	草	02/13/13 15:28	02/14/13 21:11	্ৰ
Benzo[g,h,i]perylene	12	J	22	4.8	ug/Kg	Φ	02/13/13 15:28	02/14/13 21:11	1
Benzo[k]fluoranthene	8.7	U	8.7	3.9	ug/Kg	Þ	02/13/13 15:28	02/14/13 21:11	্ৰ
Chrysene	12		9.8	4.9	ug/Kg	口口	02/13/13 15:28	02/14/13 21:11	1
Dibenz(a,h)anthracene	22	U	22	4.4	ug/Kg	Ú	02/13/13 15:28	02/14/13 21:11	1
Fluoranthene	12	J	22	4.3	ug/Kg	¢	02/13/13 15:28	02/14/13 21:11	1
Fluorene	22	U	22	4.4	ug/Kg	ij	02/13/13 15:28	02/14/13 21:11	1
Indeno[1,2,3-cd]pyrene	10	J	22	7.7	ug/Kg	\$\$	02/13/13 15:28	02/14/13 21:11	1
1-Methylnaphthalene	6.9	J	43	4.8	ug/Kg	Ü	02/13/13 15:28	02/14/13 21:11	-1
2-Methylnaphthalene	14	$p_{J}$	43	7.7	ug/Kg	i\$F	02/13/13 15:28	02/14/13 21:11	:1

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

Client Sample ID: FM0153A-CS

Date Collected: 02/06/13 10:02

Date Received: 02/08/13 09:16

TestAmerica Job ID: 680-87279-1 SDG: 68087279-1

Lab Sample ID: 680-87279-10

Matrix: Solid

Percent Solids: 91.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Naphthalene	13	J	43	4.8	ug/Kg	- ¤	02/13/13 15:28	02/14/13 21:11	1
Phenanthrene	18		8.7	4,2	ug/Kg	₽	02/13/13 15:28	02/14/13 21:11	
Pyrene	8.2	.1	22	4.0	ug/Kg	₽	02/13/13 15:28	02/14/13 21:11	

 Surrogate
 %Recovery
 Qualifier
 Limits
 Prepared
 Analyzed
 Dil Fac

 o-Terphenyl
 73
 30 - 130
 02/13/13 15:28
 02/14/13 21:11
 1

Client Sample ID: CV0748X-CS

Date Collected: 02/06/13 08:54 Date Received: 02/08/13 09:16 Lab Sample ID: 680-87279-11

Matrix: Solid

Percent Solids: 89.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	440	U	440	89	ug/Kg	₽	02/13/13 15:28	02/14/13 21:26	4
Acenaphthylene	180	U	180	22	ug/Kg	ø	02/13/13 15:28	02/14/13 21:26	4
Anthracene	36	J	37	19	ug/Kg	₽	02/13/13 15:28	02/14/13 21:26	4
Benzo[a]anthracene	140		35	17	ug/Kg	₽	02/13/13 15:28	02/14/13 21:26	4
Benzo[a]pyrene	80		46	23	ug/Kg	₽	02/13/13 15:28	02/14/13 21:26	4
Benzo[b]fluoranthene	110		54	27	ug/Kg	Ф	02/13/13 15:28	02/14/13 21:26	4
Benzo[g,h,i]perylene	84	J	89	19	ug/Kg	₽	02/13/13 15:28	02/14/13 21:26	4
Benzo[k]fluoranthene	65		35	16	ug/Kg	₽	02/13/13 15:28	02/14/13 21:26	4
Chrysene	110		40	20	ug/Kg	₽	02/13/13 15:28	02/14/13 21:26	4
Dibenz(a,h)anthracene	35	J	89	18	ug/Kg	Þ	02/13/13 15:28	02/14/13 21:26	4
Fluoranthene	200		89	18	ug/Kg	₽	02/13/13 15:28	02/14/13 21:26	4
Fluorene	89	U	89	18	ug/Kg	Þ	02/13/13 15:28	02/14/13 21:26	4
Indeno[1,2,3-cd]pyrene	72	J	89	31	ug/Kg	₽	02/13/13 15:28	02/14/13 21:26	4
1-Methylnaphthalene	89	J	180	19	ug/Kg	₽	02/13/13 15:28	02/14/13 21:26	4
2-Methylnaphthalene	99	₽ J	180	31	ug/Kg	₽	02/13/13 15:28	02/14/13 21:26	4
Naphthalene	76	J	180	19	ug/Kg	¢	02/13/13 15:28	02/14/13 21:26	4
Phenanthrene	140		35	17	ug/Kg	¢	02/13/13 15:28	02/14/13 21:26	4
Pyrene	150		89	16	ug/Kg	₽	02/13/13 15:28	02/14/13 21:26	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	78		30 - 130				02/13/13 15:28	02/14/13 21:26	4

Client Sample ID: CV0748Z-CS

Date Collected: 02/06/13 09:09

Date Received: 02/08/13 09:16

Lab Sample ID: 680-87279-12

Matrix: Solid

Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	450	U	450	90	ug/Kg	<u> </u>	02/13/13 15:28	02/14/13 21:42	4
Acenaphthylene	180	U	180	23	ug/Kg	₽	02/13/13 15:28	02/14/13 21:42	4
Anthracene	24	J	38	19	ug/Kg	₽	02/13/13 15:28	02/14/13 21:42	4
Benzo[a]anthracene	140		36	18	ug/Kg	¢	02/13/13 15:28	02/14/13 21:42	4
Benzo[a]pyrene	70		47	23	ug/Kg	ф	02/13/13 15:28	02/14/13 21:42	4
Benzo[b]fluoranthene	110		55	27	ug/Kg	Þ	02/13/13 15:28	02/14/13 21:42	4
Benzo[g,h,i]perylene	57	J	90	20	ug/Kg	ţ;	02/13/13 15:28	02/14/13 21:42	4
Benzo[k]fluoranthene	51		36	16	ug/Kg	Þ	02/13/13 15:28	02/14/13 21:42	4
Chrysene	87		41	20	ug/Kg	ťįž	02/13/13 15:28	02/14/13 21:42	4

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

Client Sample ID: CV0748Z-CS

Date Collected: 02/06/13 09:09

Date Received: 02/08/13 09:16

TestAmerica Job ID: 680-87279-1 SDG: 68087279-1

Lab Sample ID: 680-87279-12

Matrix: Solid

Percent Solids: 86.4

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	29	J	90	18	ug/Kg	₿	02/13/13 15:28	02/14/13 21:42	4
Fluoranthene	140		90	18	ug/Kg	₽	02/13/13 15:28	02/14/13 21:42	4
Fluorene	90	U	90	18	ug/Kg	ά	02/13/13 15:28	02/14/13 21:42	4
Indeno[1,2,3-cd]pyrene	54	J	90	32	ug/Kg	¤	02/13/13 15:28	02/14/13 21:42	4
1-Methylnaphthalene	34	J	180	20	ug/Kg	Ü	02/13/13 15:28	02/14/13 21:42	4
2-Methylnaphthalene	54	yo J	180	32	ug/Kg	₽	02/13/13 15:28	02/14/13 21:42	4
Naphthalene	39	J	180	20	ug/Kg	Ü	02/13/13 15:28	02/14/13 21:42	4
Phenanthrene	88		36	18	ug/Kg	Ľ1	02/13/13 15:28	02/14/13 21:42	4
Pyrene	110		90	17	ug/Kg	¢	02/13/13 15:28	02/14/13 21:42	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	100		30 - 130				02/13/13 15:28	02/14/13 21:42	4

Client Sample ID: CV0748FF-CS

Date Collected: 02/06/13 09:49 Date Received: 02/08/13 09:16

Lab Sample ID: 680-87279-14

Matrix: Solid Percent Solids: 95.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	Ď	02/13/13 15:28	02/14/13 21:57	1
Acenaphthylene	7.8	J	41	5.2	ug/Kg	¢	02/13/13 15:28	02/14/13 21:57	1
Anthracene	14		8.7	4.3	ug/Kg	Þ	02/13/13 15:28	02/14/13 21:57	1
Benzo[a]anthracene	40		8,3	4.0	ug/Kg	₽	02/13/13 15:28	02/14/13 21:57	1
Benzo[a]pyrene	34		11	5.4	ug/Kg	₽	02/13/13 15:28	02/14/13 21:57	1
Benzo[b]fluoranthene	54		13	6,3	ug/Kg	Þ	02/13/13 15:28	02/14/13 21:57	1
Benzo[g,h,i]perylene	31		21	4,5	ug/Kg	ĽĮ.	02/13/13 15:28	02/14/13 21:57	1
Benzo[k]fluoranthene	17		8.3	3.7	ug/Kg	Þ	02/13/13 15:28	02/14/13 21:57	14
Chrysene	47		9,3	4,6	ug/Kg	th.	02/13/13 15:28	02/14/13 21:57	1
Dibenz(a,h)anthracene	12	J	21	4.2	ug/Kg	₽	02/13/13 15:28	02/14/13 21:57	1
Fluoranthene	66		21	4.1	ug/Kg	Þ	02/13/13 15:28	02/14/13 21:57	3
Fluorene	21	Ų	21	4.2	ug/Kg	苁	02/13/13 15:28	02/14/13 21:57	
Indeno[1,2,3-cd]ругеле	32		21	7.3	ug/Kg	Þ	02/13/13 15:28	02/14/13 21:57	1
1-Methylnaphthalene	20	J	41	4.5	ug/Kg	ti	02/13/13 15:28	02/14/13 21:57	1
2-Methylnaphthalene	27	$\mathcal{P}_{J}$	41	7.3	ug/Kg	以	02/13/13 15:28	02/14/13 21:57	1
Naphthalene	25	J	41	4.5	ug/Kg	¢	02/13/13 15:28	02/14/13 21:57	1
Phenanthrene	47		8.3	4.0	ug/Kg	₽	02/13/13 15:28	02/14/13 21:57	
Pyrene	49		21	3.8	ug/Kg	Ď.	02/13/13 15:28	02/14/13 21:57	3
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	64		30 - 130				02/13/13 15:28	02/14/13 21:57	1

Client Sample ID: CV0748GG-CS

Date Collected: 02/06/13 09:52 Date Received: 02/08/13 09:16

Lab Sample ID: 680-87279-15

Matrix: Solid

Percent Solids: 99.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	400	U	400	80	ug/Kg	Ø	02/13/13 15:28	02/14/13 18:39	4
Acenaphthylene	160	U	160	20	ug/Kg	Ľ	02/13/13 15:28	02/14/13 18:39	4
Anthracene	33	U	33	17	ug/Kg	¢	02/13/13 15:28	02/14/13 18:39	4

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

Client Sample ID: CV0748GG-CS

Date Collected: 02/06/13 09:52

Date Received: 02/08/13 09:16

TestAmerica Job ID: 680-87279-1 SDG: 68087279-1

Lab Sample ID: 680-87279-15

Matrix: Solid

Percent Solids: 99.3

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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	120		32	16	ug/Kg	Q	02/13/13 15:28	02/14/13 18:39	4
Benzo[a]pyrene	82		41	21	ug/Kg	¢	02/13/13 15:28	02/14/13 18:39	4
Benzo[b]fluoranthene	140		49	24	ug/Kg	¢	02/13/13 15:28	02/14/13 18:39	4
Benzo[g,h,i]perylene	79	J	80	18	ug/Kg	p	02/13/13 15:28	02/14/13 18:39	4
Benzo[k]fluoranthene	50		32	14	ug/Kg	Ф	02/13/13 15:28	02/14/13 18:39	4
Chrysene	95		36	18	ug/Kg	Ċ.	02/13/13 15:28	02/14/13 18:39	4
Dibenz(a,h)anthracene	19	J	80	16	ug/Kg	贷	02/13/13 15:28	02/14/13 18:39	4
Fluoranthene	170		80	16	ug/Kg	尊	02/13/13 15:28	02/14/13 18:39	4
Fluorene	80	U	80	16	ug/Kg	tţī.	02/13/13 15:28	02/14/13 18:39	4
Indeno[1,2,3-cd]pyrene	63	J	80	28	ug/Kg	¤	02/13/13 15:28	02/14/13 18:39	4
1-Methylnaphthalene	35	J	160	18	ug/Kg	草	02/13/13 15:28	02/14/13 18:39	4
2-Methylnaphthalene	37	J	160	28	ug/Kg	草	02/13/13 15:28	02/14/13 18:39	4
Naphthalene	37	J	160	18	ug/Kg	ζí	02/13/13 15:28	02/14/13 18:39	4
Phenanthrene	89		32	16	ug/Kg	ø	02/13/13 15:28	02/14/13 18:39	4
Pyrene	150		80	15	ug/Kg	<b>‡</b>	02/13/13 15:28	02/14/13 18:39	4

Limits

30 - 130

%Recovery Qualifier

87

Analyzed 02/13/13 15:28 02/14/13 18:39

Client Sample ID: CV0748HH-CS

Date Collected: 02/06/13 10:10 Date Received: 02/08/13 09:16

Surrogate

o-Terphenyl

Lab Sample ID: 680-87279-16

Prepared

Matrix: Solid Percent Solids: 92.4

Dil Fac

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	430	U	430	86	ug/Kg	300	02/13/13 15:28	02/15/13 12:43	4
Acenaphthylene	170	U	170	21	ug/Kg	尊	02/13/13 15:28	02/15/13 12:43	4
Anthracene	22	J	36	18	ug/Kg	Ü	02/13/13 15:28	02/15/13 12:43	4
Benzo[a]anthracene	190		34	17	ug/Kg	<b></b>	02/13/13 15:28	02/15/13 12:43	4
Benzo[a]pyrene	160		45	22	ug/Kg	Þ	02/13/13 15:28	02/15/13 12:43	4
Benzo[b]fluoranthene	240		52	26	ug/Kg	Þ	02/13/13 15:28	02/15/13 12:43	4
Benzo[g,h,i]perylene	150		86	19	ug/Kg	¢	02/13/13 15:28	02/15/13 12:43	4
Benzo[k]fluoranthene	110		34	15	ug/Kg	以	02/13/13 15:28	02/15/13 12:43	4
Chrysene	180		39	19	ug/Kg	草	02/13/13 15:28	02/15/13 12:43	4
Dibenz(a,h)anthracene	38	J	86	18	ug/Kg	Ü	02/13/13 15:28	02/15/13 12:43	4
Fluoranthene	270		86	17	ug/Kg	ø	02/13/13 15:28	02/15/13 12:43	4
Fluorene	86	U	86	18	ug/Kg	Ċ.	02/13/13 15:28	02/15/13 12:43	4
Indeno[1,2,3-cd]pyrene	110		86	30	ug/Kg	-¢i	02/13/13 15:28	02/15/13 12:43	4
1-Methylnaphthalene	53	J	170	19	ug/Kg	Ċ.	02/13/13 15:28	02/15/13 12:43	4
2-Methylnaphthalene	70	J	170	30	ug/Kg	以	02/13/13 15:28	02/15/13 12:43	4
Naphthalene	78	J	170	19	ug/Kg	Ç	02/13/13 15:28	02/15/13 12:43	4
Phenanthrene	140		34	17	ug/Kg	Ġ.	02/13/13 15:28	02/15/13 12:43	4
Pyrene	240		86	16	ug/Kg	φ	02/13/13 15:28	02/15/13 12:43	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	99		30 - 130				02/13/13 15:28	02/15/13 12:43	4

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87279-1

SDG: 68087279-1

Client Sample ID: CV0748KK-CS

Date Collected: 02/06/13 10:41 Date Received: 02/08/13 09:16

Lab Sample ID: 680-87279-17

Matrix: Solid

Percent Solids: 97.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	<u>\$</u>	02/14/13 08:35	02/18/13 15:41	1
Аселарhthylene	8.0	J	41	5.1	ug/Kg	Ø	02/14/13 08:35	02/18/13 15:41	1
Anthracene	17		8.6	4.3	ug/Kg	Ø.	02/14/13 08:35	02/18/13 15:41	1
Benzo[a]anthracene	100	0000000 000	8.2	4.0	ug/Kg	ø	02/14/13 08:35	02/18/13 15:41	1
Benzo[a]pyrene	91		11	5.3	ug/Kg	₩	02/14/13 08:35	02/18/13 15:41	1
Benzo[b]fluoranthene	140		13	6.3	ug/Kg	₽	02/14/13 08:35	02/18/13 15:41	1
Benzo[g,h,i]perylene	75		21	4.5	ug/Kg	⇔	02/14/13 08:35	02/18/13 15:41	1
Benzo[k]fluoranthene	55		8.2	3.7	ug/Kg	Þ	02/14/13 08:35	02/18/13 15:41	1
Chrysene	100		9.2	4.6	ug/Kg	₽	02/14/13 08:35	02/18/13 15:41	1
Dibenz(a,h)anthracene	19	J	21	4.2	ug/Kg	ф	02/14/13 08:35	02/18/13 15:41	1
Fluoranthene	180		21	4.1	ug/Kg	₽	02/14/13 08:35	02/18/13 15:41	1
Fluorene	6.5	J	21	4.2	ug/Kg	₽	02/14/13 08:35	02/18/13 15:41	1
Indeno[1,2,3-cd]pyrene	63		21	7.3	ug/Kg	¢	02/14/13 08:35	02/18/13 15:41	1
1-Methylnaphthalene	44		41	4.5	ug/Kg	₽	02/14/13 08:35	02/18/13 15:41	1
2-Methylnaphthalene	39	J	41	7.3	ug/Kg	₽	02/14/13 08:35	02/18/13 15:41	1
Naphthalene	34	J	41	4.5	ug/Kg	\$	02/14/13 08:35	02/18/13 15:41	1
Phenanthrene	97		8,2	4.0	ug/Kg	Þ	02/14/13 08:35	02/18/13 15:41	1
Pyrene	150		21	3.8	ug/Kg	₿	02/14/13 08:35	02/18/13 15:41	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	61	-	30 - 130				02/14/13 08:35	02/18/13 15:41	1

Client Sample ID: CV0748LL-CS

Date Collected: 02/06/13 10:48 Date Received: 02/08/13 09:16

Lab Sample ID: 680-87279-18

Matrix: Solid

Percent Solids: 92.6

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	U	100	21	ug/Kg	草	02/14/13 08:35	02/18/13 16:00	9
Acenaphthylene	18	J	42	5.2	ug/Kg	₽	02/14/13 08:35	02/18/13 16:00	- 1
Anthracene	18		8.8	4.4	ug/Kg	₽	02/14/13 08:35	02/18/13 16:00	1
Benzo[a]anthracene	120		8.4	4.1	ug/Kg	₽	02/14/13 08:35	02/18/13 16:00	1
Benzo[a]pyrene	120		11	5.5	ug/Kg	Ф	02/14/13 08:35	02/18/13 16:00	া
Benzo[b]fluoranthene	190		13	6.4	ug/Kg	₽	02/14/13 08:35	02/18/13 16:00	-1
Benzo[g,h,i]perylene	100		21	4.6	ug/Kg	尊	02/14/13 08:35	02/18/13 16:00	1
Benzo[k]fluoranthene	91		8.4	3.8	ug/Kg	₽	02/14/13 08:35	02/18/13 16:00	1
Chrysene	130		9.4	4.7	ug/Kg	₽	02/14/13 08:35	02/18/13 16:00	1
Dibenz(a,h)anthracene	28		21	4.3	ug/Kg	₽	02/14/13 08:35	02/18/13 16:00	1
Fluoranthene	210		21	4.2	ug/Kg	₽	02/14/13 08:35	02/18/13 16:00	1
Fluorene	9.4	J	21	4.3	ug/Kg	¢	02/14/13 08:35	02/18/13 16:00	1
Indeno[1,2,3-cd]pyrene	79		21	7.4	ug/Kg	¢	02/14/13 08:35	02/18/13 16:00	1
1-Methylnaphthalene	37	J	42	4.6	ug/Kg	¢	02/14/13 08:35	02/18/13 16:00	-1
2-Methylnaphthalene	43		42	7.4	ug/Kg	¢	02/14/13 08:35	02/18/13 16:00	1
Naphthalene	48		42	4.6	ug/Kg	贷	02/14/13 08:35	02/18/13 16:00	1
Phenanthrene	96		8.4	4.1	ug/Kg	贷	02/14/13 08:35	02/18/13 16:00	1
Pyrene	200		21	3,9	ug/Kg	¢	02/14/13 08:35	02/18/13 16:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	79		30 - 130				02/14/13 08:35	02/18/13 16:00	1

Client: Oneida Total Integrated Enterprises LLC Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-87279-1

SDG: 68087279-1

Client Sample ID: CV0748MM-CS

Date Collected: 02/06/13 10:50 Date Received: 02/08/13 09:16

Lab Sample ID: 680-87279-19

Matrix: Solid Percent Solids: 82.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	24	ug/Kg	ä	02/14/13 08:35	02/18/13 16:18	1
Acenaphthylene	48	U	48	6.0	ug/Kg	ü	02/14/13 08:35	02/18/13 16:18	ব
Anthracene	10	U	10	5,0	ug/Kg	贷	02/14/13 08:35	02/18/13 16:18	1
Benzo[a]anthracene	29	.,,	9.6	4.7	ug/Kg	¢	02/14/13 08:35	02/18/13 16:18	1
Benzo[a]pyrene	23		12	6.2	ug/Kg	₩	02/14/13 08:35	02/18/13 16:18	1
Benzo[b]fluoranthene	31		15	7,3	ug/Kg	草	02/14/13 08:35	02/18/13 16:18	9
Benzo[g,h,i]perylene	15	J	24	5.3	ug/Kg	₽	02/14/13 08:35	02/18/13 16:18	1
Benzo[k]fluoranthene	20		9.6	4.3	ug/Kg	₽	02/14/13 08:35	02/18/13 16:18	1
Chrysene	27		11	5.4	ug/Kg	Ü	02/14/13 08:35	02/18/13 16:18	4
Dibenz(a,h)anthracene	5.4	J	24	4.9	ug/Kg	₽	02/14/13 08:35	02/18/13 16:18	- 1
Fluoranthene	40		24	4,8	ug/Kg	₽	02/14/13 08:35	02/18/13 16:18	1
Fluorene	24	U	24	4.9	ug/Kg	Þ	02/14/13 08:35	02/18/13 16:18	4
Indeno[1,2,3-cd]pyrene	14	j	24	8.5	ug/Kg	ф	02/14/13 08:35	02/18/13 16:18	1
1-Methylnaphthalene	7.2	J	48	5.3	ug/Kg	₽	02/14/13 08:35	02/18/13 16:18	1
2-Methylnaphthalene	11	J	48	8.5	ug/Kg	¢	02/14/13 08:35	02/18/13 16:18	1
Naphthalene	11	J	48	5.3	ug/Kg	Ç	02/14/13 08:35	02/18/13 16:18	1
Phenanthrene	22		9.6	4.7	ug/Kg	₽	02/14/13 08:35	02/18/13 16:18	1
Pyrene	41		24	4.4	ug/Kg	₽	02/14/13 08:35	02/18/13 16:18	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Client Sample ID: CV0748PP-CS

Date Collected: 02/06/13 11:10

o-Terphenyl

Lab Sample ID: 680-87279-20

02/14/13 08:35 02/18/13 16:18

Matrix: Solid

Percent Solids: 96.2 Date Received: 02/08/13 09:16

30 - 130

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	100	Ū	100	21	ug/Kg	Ç!	02/14/13 08:35	02/15/13 17:52	1
Acenaphthylene	20	J	41	5.1	ug/Kg	Ö	02/14/13 08:35	02/15/13 17:52	1
Anthracene	57		8.6	4,3	ug/Kg	¢	02/14/13 08:35	02/15/13 17:52	1
Benzo[a]anthracene	340		8.2	4.0	ug/Kg	₽	02/14/13 08:35	02/15/13 17:52	1
Benzo[a]pyrene	190		11	5.3	ug/Kg	Φ	02/14/13 08:35	02/15/13 17:52	1
Benzo[b]fluoranthene	290		13	6.3	ug/Kg	ά	02/14/13 08:35	02/15/13 17:52	1
Benzo[g,h,i]perylene	170		21	4.5	ug/Kg	Ċ	02/14/13 08:35	02/15/13 17:52	3
Benzo[k]fluoranthene	130		8.2	3.7	ug/Kg	Ċ	02/14/13 08:35	02/15/13 17:52	1
Chrysene	300		9.2	4.6	ug/Kg	¢	02/14/13 08:35	02/15/13 17:52	1
Dibenz(a,h)anthraceле	64		21	4.2	ug/Kg	Δ	02/14/13 08:35	02/15/13 17:52	1
Fluoranthene	600		21	4.1	ug/Kg	¢	02/14/13 08:35	02/15/13 17:52	1
Fluorene	11	J	21	4.2	ug/Kg	Ü	02/14/13 08:35	02/15/13 17:52	1
Indeno[1,2,3-cd]pyrene	170		21	7.3	ug/Kg	ø	02/14/13 08:35	02/15/13 17:52	4
1-Methylnaphthalene	26	J	41	4.5	ug/Kg	Ü	02/14/13 08:35	02/15/13 17:52	4
2-Methylnaphthalene	35	ر حور	41	7.3	ug/Kg	¢	02/14/13 08:35	02/15/13 17:52	-1
Naphthalene	32	J	41	4.5	ug/Kg	Ø	02/14/13 08:35	02/15/13 17:52	- 4
Phenanthrene	300		8.2	4.0	ug/Kg	Ø	02/14/13 08:35	02/15/13 17:52	1
Pyrene	480		21	3.8	ug/Kg	ņ	02/14/13 08:35	02/15/13 17:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	66		30 - 130				02/14/13 08:35	02/15/13 17:52	1